

AMENDMENTS TO THE CLAIMS

1-15. (Cancelled)

16. (Previously Presented) A process for producing a low molecular weight polyphenylene ether having a reduced viscosity (η_{sp}/c), as measured at 30°C in a 0.5g/dl chloroform solution, of 0.04-0.18 dl/g, and a molecular weight distribution of 1.5-2.5, which comprises sequential the steps of:

polymerizing a phenol compound in the presence of a catalyst and oxygen-containing gas using a good solvent of said low molecular weight polyphenylene ether to obtain a polyphenylene ether solution; and

precipitating a low molecular weight polyphenylene ether having a reduced viscosity (η_{sp}/c), as measured at 30°C in a 0.5g/dl chloroform solution, of 0.04-0.18 dl/g by adding a poor solvent of said low molecular weight polyphenylene ether to said polyphenylene ether solution, wherein said precipitation is carried out at the temperature in the range of -80 to 20°C.

17. (Original) The process according to claim 16, wherein the poor solvent is an alcohol having 1-10 carbon atoms.

18. (Original) The process according to claim 16, wherein the poor solvent is at least one solvent selected from the group consisting of methanol, ethanol, propanol, butanol, pentanol, hexanol and ethylene glycol.

19. (Original) The process according to claim 17 or 18, wherein the poor solvent further comprises water.

20. (Previously Presented) A process for producing a low molecular weight polyphenylene ether having a reduced viscosity (η_{sp}/c), as measured at 30°C in a 0.5g/dl chloroform solution, of 0.04-0.18 dl/g, and a molecular weight distribution of 1.5-2.5, which comprises the steps of:

polymerizing a phenol compound in the presence of polymerization solvent, a catalyst and oxygen-containing gas; and

precipitating said low molecular weight polyphenylene ether in the course of the polymerization,

wherein the polymerization solvent is a mixture of at least two alcohols.

21. (Original) The process according to claim 20, wherein the polymerization solvent is a mixture of at least two alcohols having 1-10 carbon atoms.

22. (Previously Presented) The process according to claim 20, wherein the polymerization solvent is a mixture of at least two alcohols selected from the group consisting of methanol, ethanol, propanol, butanol, pentanol, hexanol and ethylene glycol.

23. (Previously Presented) The process according to claim 20, which further comprises the step of purifying a slurry comprising the precipitated low molecular weight polyphenylene ether by washing;

wherein the washing solvent is at least one solvent selected from the group consisting of methanol, ethanol, propanol, butanol, pentanol, hexanol and ethylene glycol.

24. (Original) The process according to claim 23, wherein the washing solvent further comprises water.

25. (Original) The process according to claim 23, which further comprises the step of removing the contained solvent from a washed low molecular weight polyphenylene ether by drying and devolatilization,

26. (Previously Presented) The process according to claim 20, which further comprises the steps of separating the low molecular weight polyphenylene ether from a slurry comprising the precipitated low molecular weight polyphenylene ether to obtain a wet low molecular weight polyphenylene ether, and removing the contained solvent from said wet low molecular weight polyphenylene ether by drying and devolatilization.

27. (Previously Presented) A low molecular weight polyphenylene ether which has a reduced viscosity (η_{sp}/c), as measured at 30°C in a 0.5g/dl chloroform solution, of 0.04-0.18 dl/g, and a molecular weight distribution of 1.5-2.5, wherein

said low molecular weight polyphenylene ether is obtained by a process, which comprises the steps of:

polymerizing a phenol compound in the presence of a catalyst and an oxygen-containing gas using a good solvent of said low molecular weight polyphenylene ether;

adding a poor solvent of said low molecular weight polyphenylene ether to the polyphenylene ether solution obtained by said polymerization; and

precipitating a low molecular weight polyphenylene ether at the temperature in the range of - 80 to 20°C.

28. (Previously Presented) A low molecular weight polyphenylene ether which has a reduced viscosity (η_{sp}/c), as measured at 30°C in a 0.5g/dl chloroform solution, of 0.04-0.18 dl/g, and a molecular weight distribution of 1.5-2.5, wherein said low molecular weight polyphenylene ether is obtained by a process, which comprises the steps of:

polymerizing a phenol compound in the presence of polymerization solvent, a catalyst and an oxygen-containing gas; and

precipitating said low molecular weight polyphenylene ether in the course of the polymerization,

wherein the polymerization solvent is a mixture of at least two alcohols.

29. (Previously Presented) The process according to claim 16, which further comprises the step of purifying a slurry comprising the precipitated low molecular weight polyphenylene ether by washing;

wherein the washing solvent is at least one solvent selected from the group consisting of methanol, ethanol, propanol, butanol, pentanol, hexanol and ethylene glycol.

30. (Previously Presented) The process according to claim 29, wherein the washing solvent further comprises water.

31. (Previously Presented) The process according to claim 29, which further comprises the step of removing the contained solvent from a washed low molecular weight polyphenylene ether by drying and devolatilization.

32. (Previously Presented) The process according to claim 16, which further comprises the steps of separating the low molecular weight polyphenylene ether from a slurry comprising the precipitated low molecular weight polyphenylene ether to obtain a wet low molecular weight polyphenylene ether, and removing the contained solvent from said wet low molecular weight polyphenylene ether by drying and devolatilization.